



UNITED STATES DEPARTMENT OF COMMERCE

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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO.

08/906,493 08/05/97 FREEMAN

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EXAMINER

LE, V

ART UNIT

14

DATE MAILED:

06/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)
	08/906,493	FREEMAN ET AL.
Examiner	Art Unit	
Vu Le	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04 April 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-21 and 32-45 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-21 and 32-45 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) Notice of References Cited (PTO-892)
- 16) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 18) Interview Summary (PTO-413) Paper No(s) _____.
- 19) Notice of Informal Patent Application (PTO-152)
- 20) Other: _____.

DETAILED ACTION

Response to Arguments

1. In view of the arguments presented in the Appeal Brief filed on April 4, 2001,
PROSECUTION IS HEREBY REOPENED. A new Office Action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the
following two options:

- (a) file a reply under 37 CFR 1.111 (if this Office action is non-final) or
a reply under 37 CFR 1.113 (if this Office action is final); or,
- (b) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied
by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130,
1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Applicant's arguments with respect to claims 1-21 and 32-45 have been
considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that
form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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4. Claims 1-2, 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Coiner et al, US 5,638,273.

Re claim 1 and 15, Coiner discloses the same recording device (fig. 1) and method for capturing data comprising: at least one memory (120) for storing data associated with a time period (i.e., trigger mode storage interval, col. 3, lines 63-65); a control processor (108) operative to store the data in said at least one memory such that the stored data associated with a portion of the time period closer to an event has a first resolution and the stored data associated with a portion of the time period further from the event has a second resolution different than the first resolution (col. 1, line 66 to col. 2, line 5, col. 2, line 53 to col. 3, line 7). In Coiner, the event as claimed is the trigger event.

Re claim 2, in Coiner, sensors (102) are representative of a plurality of sensors, inclusive of one for providing said data as claimed, and one for providing parameters that would initiate a trigger event (col. 2, lines 38-52, col. 4, lines 4-7). The rest of claim 2 which pertains to the control processor as claimed is a repeat of claim 1, which has been considered.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coiner et al in view of Yamawaki, US 5,446,659.

Re claim 3, Coiner discloses a plurality of sensors (fig. 1, 102) for providing different sort of data inclusive of data for initiating a trigger event. However, Coiner fails to elaborate if one of said sensors is an accelerometer as claimed.

Yamawaki is a related art to Coiner that makes it obvious of using an accelerometer (fig. 1, 3, col. 2, lines 10-23) for detecting accelerating data leading up to an event, like a traffic accident.

Having the combined teaching of Coiner and Yamawaki as a whole, it would have been obvious to incorporate an accelerometer detector as claimed. Doing so would have provided an added perspective of determining the rate of acceleration of a moving vehicle leading up to the event, such as an accident.

7. Claims 1-2, 4-8, 10-12, 15-19 and 36-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishijima, PN 5915069.

Re claims 1 and 15, Nishijima discloses a recording device (fig. 1) and method for capturing data comprising:

at least one memory (3b) for storing data associated with a time period (i.e., the recording modes in Nishijima corresponds to a set time period (col. 4, lines 12-27, col. 8, lines 4-15);

a control processor (3c) operative to store the data in said at least one memory (3b) such that the stored data associated with a portion of the time period closer to an

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event has a first resolution and the stored data associated with a portion of the time period further from the event has a second resolution different than the first resolution (See col. 3, line 25 to col. 4, line 11).

Note: In Nishijima (fig. 1) sensors are provided to generate a detection signal to indicate occurrence of an event. In response to the detection signal recording is commenced with a specified compression ratio and recording mode via control signals. Moreover, compression ratio may be low, medium or high as dictated by an occurrence of an event. For example, when the sensor is triggered, in effect, an event has occurred, the compression rate at that time immediate to the occurrence is lower than during the time further away and leading up to the occurrence of the event.

Re claim 2, in Nishijima, video camera (1) is operative to generate the data, and sensors (5-1, 5-2) are operative to generate a signal representing the event.

Re claim 4, in Nishijima, input keys (3d) serves the same functionality as the user activated capture switch as claimed because the user through the input keys can specified different compression rate, interval of compression rate and recording modes. (See col. 4, lines 22-27, col. 8, lines 30-53).

Re claim 5, the same functionality as claimed is disclosed in Nishijima (col. 7, line 64 to col. 8, line 15).

Re claim 6, the compression capability and compressing at different compression ratio in time relation to the time period the event occurs as claimed is also disclosed in Nishijima. (See col. 3, line 49 to col. 4, line 11, col. 5, line 41 to col. 6, line 6, col. 7, line 64 to col. 8, line 15).

Re claims 7-8, in Nishijima (col. 3, line 25 to col. 4, line 11), different compression ratio result in different image resolutions and different data rates. In other words, low compression ratio resulted in more original data being retained without compression, thus, resulting in higher image resolution and higher data rate, and vice-versa.

Re claim 10, Nishijima discloses the same requirements as claimed. (See fig. 6; col. 6, line 36 to col. 7, line 40).

Re claim 11, Nishijima discloses the same requirement as claimed. (col. 3, lines 3-10).

Re claim 12, it is inherent that the video camera (1) of Nishijima includes a lens for focusing as claimed.

Re claim 16, the grounds for rejecting claim 7-8 above also apply here.

Re claim 17, the grounds for rejecting claims 7-8 above also apply here. Furthermore, the different compression ratio as disclosed in Nishijima is indicative that the compression routine is an asymmetric type as claimed.

Re claims 18 and 36, the encrypting step as claimed is disclosed in Nishijima as the process of error detection and correction (col. 4, lines 61-64).

Re claim 19, the grounds for rejecting claims 1 and 15 above also apply here.

Re claims 37-39, the compression protocol used in Nishijima is DCT/quantization, which covers spatial resolutions (see col. 4, lines 28-64). Nishijima also discloses that interframe/intraframe compression may be used (col. 10, lines 31-

37). Interframe/intraframe compression technique would inherently comprise temporal and spatial resolutions.

8. Claims 9, 20-21, 32-35, and 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishijima.

Re claim 9, Nishijima discloses (col. 3, line 49 to col. 4, line 11) that compression rate is lower during the time the event occurs as opposed to the compression rate when no event occurs. Furthermore, Nishijima discloses that a continuous recording mode and high compression rate are the choice when no event occurs. Thus, after the event has occurred, the compression rate and recording rate would resume at the level of continuous recording mode, which means that the compression rate are higher, which translates to lower data rate. How much of the data are lower than the data when the event occurs is simply a design preference. Nishijima discloses several compression rates. Certainly, it would have been obvious to have a compression rate that would ensure that half of the data are recorded after an event occurs as opposed to the compression rate that would yield more data during the time the event occurs.

Re claims 20-21, 41-42, in Nishijima, the compression ratio and recording modes are user specified via key inputs (3d, fig. 1, col. 8, lines 1-15). Thus, it would have been obvious to specify different compression ratio to yield different image resolutions and different recording rate in the manner as claimed.

Re claims 32-33, Nishijima fails to disclose that the surveillance system comprises a tamper resistant housing, and that said housing is portable. However,

Examiner takes Official Notice that enclosing a video sensor in a tamper resistant housing and making it portable in a surveillance environment as claimed are nothing new, and is widely practiced in the art. Thus, these features as claimed are non-inventive features and incorporating them is a simple matter of design choice to achieve a desirable effects.

Re claim 34, Nishijima discloses (col. 3, lines 31-33) that a RAM may be used as a recording medium. It is obvious that a RAM memory may be purged of its content upon an ON/OFF activation of a switch.

Re claims 35 and 43, Nishijima discloses having different compression ratio, thus, it is obvious that different image resolutions will result from that. To which degrees these image resolutions differ from one another is an obvious design choice. The grounds for rejecting claims 1 and 15 above also apply here.

Re claim 40, in Nishijima, the compression ratio and recording modes are user specified via key inputs (3d, fig. 1, col. 8, lines 1-15) in relation to an occurrence of an event. The amount of compression and the type of recording mode selected dictate how much of the data may be stored before, during and after an event has occurred. Thus, to store a predetermined amount of data following the event as claimed is obvious in view of this disclosure. The grounds for rejecting claims 1 and 15 also apply here.

9. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishijima for the same reasons as applied to claim 1 above and further in view of Freeman, US 6,002,808 and Chow, US 5,016,633.

Re claims 13-14, Nishijima fails to disclose that the image sensor includes an artificial retina as claimed. However, it is viewed that incorporating an artificial retina as claimed is a simple matter of design choice using well known art to achieve a desirable effect. In any event, using artificial retina in an image sensor is well documented in Chow (col. 2, lines 7-47) and Freeman (col. 3, lines 28-44) and therefore would have rendered it obvious to implement in the image sensor of Nishijima.

10. Claims 1-4 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Gustin, US 5,056,056.

Re claims 1 and 15, Gustin discloses the same recording device and method for capturing data (fig. 1) comprising:

at least one memory for storing data associated with a time period (col. 3, lines 39-51, col. 4, lines 22-60);

a control processor operative to store the data in the at least one memory such that the stored data associated with a portion of the time period closer to an event has a first resolution and the stored data associated with a portion of the time period further from the event has a second resolution different than the first resolution (col. 4, lines 39-60). Note: in Gustin the triggering event would constitute "a time period" as claimed.

Re claim 2, the first sensor to generate the data is also disclosed in Gustin (col. 1, lines 50-57, col. 3, lines 1-23); the second sensor to generate a signal representing the event is also disclosed in Gustin (col. 4, lines 15-54).

The operation of the control processor is claimed is the same as in claim 1, therefore, the grounds for rejecting claim 1 apply here.

Re claim 3, Gusting discloses the same as claimed (col. 4, lines 34-37).

Re claim 4, the user activated capture switch to start recording of the data as claimed is also disclosed in Gustin (col. 4, lines 31-22-38).

11. Claim 44 is rejected under 35 U.S.C. 102(b) as being anticipated by Gustin, US 5,056,056.

Re claim 44, Gustin discloses the same compact portable device (fig. 1) for recording data with no moving part comprising: sensor(s) for generating data associated with a period of time (col. 1, lines 49-57, col. 3, lines 1-15); sensor(s) for generating a signal representing an event (col. 4, lines 22-29); a circular buffer for storing the data (col. 3, lines 39-51); a control processor operative to receive the signal representing the event and to store the data in said circular buffer wherein the data stored associated with a portion of the time period after receipt of the event signal has a first resolution and the stored data associated with a portion of the time prior to receipt of the event signal has a second resolution lower than the first resolution (col. 3, line 39 to col. 4, line 21, col. 4, lines 43-60); a portable housing (fig. 1, 15); and at least one connector disposed on said housing for outputting the stored data (fig. 1, 30).

12. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gustin.

Re claim 45, Gustin discloses a user generated start signal to start data recording in which the recording period and the rate of data acquisition are user selected (col. 4, lines 31-60). If a user activated still recording of a single data sample

as claimed is desirable, it is viewed that such capability is obvious in view of Gustin since such function is within the confine of the user generated start signal and user selected recording time and recording rate as disclosed in Gustin.

Gusting discloses a RAM as the memory modules for recording data (col. 3, lines 24-38). Gusting discloses having a memory backup to ensure that recorded data are retained even when power is off. However, if Gustin were to purge data from the RAM memory as claimed, the memory backup may be turned off to achieve to task. Thus, purging data from the memory with a switch as claimed is obvious in view of Gustin.

The power source for powering the sensor, the control processor and the circular memory as claimed is substantially disclosed in Gustin (col. 3, lines 34-38).

The tamper resistant housing as claimed is also disclosed in Gustin (fig. 1).

Contacts

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Vu Le whose telephone number is (703) 308-6613. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5:00 PM.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700 or Customer Service whose number is (703) 308-6789.

Very Important!

The fax number for submitting all Official communications is (703) 872-9314.

The fax number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at (703) 746-6867.

VULE
PRIMARY EXAMINER